



Mail

Hypertension in mother and baby linked to ingestion of Chinese herbal medicine

To the Editors,

Dong quai is a popular Chinese herbal medicine. In China, it is prepared as a soup, with half-dollar-sized pieces of thinly cut, dried root of *Angelica sinensis* added to chicken stock. In the United States, dong quai is sold as a powder contained in capsules. It is among the 20 top-selling herbal medicines.¹ It is taken by women as palliation for dysmenorrhea, irregular menstruation, anemia, postpartum weakness, and uterine hypotonia. Some doctors also prescribe dong quai for premenstrual syndrome and menopausal symptoms. We report a possible association of dong quai with hypertension in a mother and her breast-fed infant. We are unaware of any such association having been reported previously.

A 32-year-old woman of Chinese-Malaysian origin, 3 weeks postpartum, was treated in our emergency department (ED) for the acute onset of headaches, weakness, lightheadedness, and vomiting. Her blood pressure in the ED was 195/85 mm Hg, repeated several times. Review of her medical records revealed that she had been normotensive and normoglycemic during her uneventful term delivery.

The patient stated that she had ingested a special ethnic soup prepared by her mother, who had recently arrived from Malaysia to help with postpartum chores. The soup had been made with pieces of the dong quai root (*Angelica sinensis*) purchased in Malaysia. The patient denied taking other medicinals or herbal remedies. She said she had ingested dong quai soup twice on the day she presented in the ED, although we were not able to assess the dosage of dong quai in the soup nor could we learn if her

ingestion represented a possible overdose. Her ED evaluation including blood chemistry panels and CT of the head was normal. She improved rapidly and was normotensive within 12 hours.

The next day, her 3-week-old son was taken to his pediatrician for evaluation for possible hypertension. The infant's blood pressure was 115/69 and 117/63 in the left leg and arm, respectively (90th centile for age is 106/65). The elevated blood pressure was confirmed by successive Dynamapp™ readings over 30 minutes. The baby was not treated with antihypertensive medication, and his pressure normalized within 48 hours. During that time, breastfeeding was temporarily withheld.

A possible explanation for hypertension in this woman and her child is an adverse effect of dong quai soup, passed to the child in the breast milk. We could not confirm this explanation because we were unable to obtain a sample of the soup for toxicological analysis. Pieces of the dong quai root purchased in Malaysia in the same herbal medicine shop were obtained, however, and were identified as true dong quai by an expert in Chinese herbal medicine. In addition, toxicological analysis of samples of sliced, dried dong quai root, purchased from a Chinese herbal pharmacy in San Francisco, and of granular dong quai root in capsule form, purchased in a pharmacy (Nature's Way, 565 mg/capsule), showed no analytic differences between the root and the capsular product.

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Reference

- 1 Blumenthal M, Gruenwald J, Hall T, Riggins C, et al. German Commission E monographs: Medicinal plants for human use. Austin, TX: American Botanical Council. 1998;12.